

1    **CLAIMS:**

2    1.    A fire retarding device for covering a hot casing,  
3        comprising:

4        a flexible member adapted for superposition on the hot  
5           casing, said member adapted to cover at least a  
6           portion of the hot casing, said member comprising  
7           intermingled filaments forming a porous flame  
8           arresting fibrous network; said fibrous network  
9           having a volume being more porous than dense, and  
10          wherein said filaments are arranged to define voids  
11          of a maximum size throughout said fibrous network,  
12          and wherein said maximum void size is chosen to  
13          limit flame propagation of an ignited fluid through  
14          said member.

15   2.    The fire retarding device as defined in claim 1, wherein  
16          the fire retarding device is removable from said hot  
17          casing.

18   3.    The fire retarding device as defined in claim 1, wherein  
19          said filaments are irregularly intertwined to form said  
20          fibrous network.

21   4.    The fire retarding device as defined in claim 1, wherein  
22          said member is entirely comprised of said flame  
23          arresting fibrous network.

24   5.    The fire retarding device as defined in claim 1, further  
25          comprising a plurality of insulative thermal blankets

1 disposed adjacent one another around said hot casing,  
2 and wherein a said flexible member is disposed between  
3 adjacent sections of said insulative thermal blankets.

4 6. The fire retarding device as defined in claim 1, further  
5 comprising an insulative thermal blanket disposed around  
6 said hot casing, and wherein a said flexible member is  
7 disposed around said insulative thermal blanket.

8 7. The fire retarding device as defined in claim 1, wherein  
9 said member is disposed immediately adjacent said hot  
10 casing.

11 8. The fire retarding device as defined in claim 1, wherein  
12 said hot casing is an aircraft engine casing.

13 9. The fire retarding device as defined in claim 1, wherein  
14 said filaments are metal.

15 10. A fire retarding device for covering a hot casing,  
16 comprising:

17 a blanket said member adapted to cover at least a  
18 portion of the hot casing, said blanket comprising a  
19 plurality of filaments arranged to form a flame  
20 arresting matrix, said filaments intersecting in  
21 said matrix to form a plurality of voids in said  
22 matrix, said voids being smaller than a maximum size  
23 throughout said mesh matrix, said maximum size  
24 predetermined being to limit flame propagation of an  
25 ignited fluid across said voids.

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1 11. The fire retarding device as defined in claim 10,  
2 wherein said blanket is disposed immediately adjacent  
3 said hot casing.

4 12. A fire retarding device for covering a hot casing,  
5 comprising:

6 a member adapted to cover at least a portion of the hot  
7 casing, said member comprising a porous flame  
8 arresting matrix having a plurality of substantially  
9 interconnected voids defined therein, said voids  
10 having a maximum size, said maximum size being  
11 predetermined to limit flame propagation of an  
12 ignited fluid across said voids.

13 13. The fire retarding device as defined in claim 12,  
14 wherein said member is disposed immediately adjacent on  
15 the hot casing.

16 14. The fire retarding device as defined in claim 12,  
17 further comprising at least one insulative thermal  
18 blanket.

19 15. The fire retarding device as defined in claim 12,  
20 wherein the hot casing is an aircraft jet engine casing  
21 and wherein said flammable fluid is jet fuel.

22 16. The fire retarding device as defined in claim 12,  
23 wherein said flame arresting matrix has a percent-  
24 density of between 10% and 30%.

1 17. The fire retarding device as defined in claim 12,  
2 wherein said voids do not exceed a maximum size in at  
3 least a direction extending substantially outwardly from  
4 said hot casing.

5 18. The fire retarding device as defined in claim 12,  
6 wherein said member is removable from said hot casing.

7 19. The fire retarding device as defined in claim 12,  
8 wherein said member is composed of a metal.

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